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ABSTRACT

This series of symposium papers examines the phenomena of environmental attitudes, values, and ethics from a psychological, philosophical/religious, and Western religion perspective. The psychological view is examined from three standpoints: the internalist position, explaining behavior from events within the individual; the interactionist position, emphasizing interaction between an individual and the environment; and the externalist position, accounting behavior in terms of events outside of the individual. Illustrations are provided from observations of environmentalists and educators. The author provides suggestions for incorporating these perspectives in environmental education programs. The subscriber of the religious viewpoint believes the environmental crisis to be one of man's understanding of himself. She realizes a need for institutional change, but emphasizes its origin with a self-reform, which can be affected through the schools. The proponent of the Judeo-Christian ethic examines the relationship between God and human beings. This position states that God still owns and controls earth and will do so with or without us; that justice is the priority in achieving harmony with our ecological niche; and that human values are our potential for positive action. The second section of this document presents a series of questions and reports responses of the panelists. (BP)

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AN OVERVIEW OF ENVIRONMENTAL ATTITUDES,
VALUES, AND ETHICS: A SYMPOSIUM

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In this symposium, the discussants examined the phenomena of environmental attitudes, values, and ethics from three perspectives: Dr. Root from the psychological perspective, Dr. Baer from the philosophical/religious perspective, and Rev. Steffenson from the western religion perspective.

The documents which follow reflect the intent of this symposium to maximize interaction between conference participants and the discussants: Section 1 includes the papers presented by each panelist and the subsequent Discussion and Question period. Section 2 reports responses of the panelists to questions submitted by the conference participants at the conclusion of ~~the~~ symposium.

P. R. Mehne

SECTION 1: SYMPOSIUM PAPERS

Psychological Perspectives and Environmental Education

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What do psychologists have to contribute to the plans and activities of those concerned with environmental education? A variety of perspectives and some practical recommendations for action. Psychologists are concerned with behavior - with understanding current performances, with accounting for the learning that led to today's behavior, and with suggesting how current events can be designed to change present performance. The explanations that psychologists provide for human events are as many-hued as Jacob's fabled coat. But among the diverse points of view that psychologists take as they look at human activities, there are some perspectives that are particularly meaningful to us, here.

It is useful to think of three different psychological perspectives: the point of view that tends to explain behavior in terms of events within the individual (the internalist position); explanations that tend to emphasize the interaction between an individual and his/her environment (the interactionist position); and explanations that account for human behavior in terms of events that are almost wholly outside of the individual or group (the externalist position). For each of these three psychological orientations, I'd like to give illustrations drawn

from observations of both environmentalists and educators, and make suggestions on how environmental educators might use these perspectives to enrich their programs and enhance their effectiveness.

The Internalist Position

There are many psychologists who seek explanations for human behavior in terms of events and processes within the single individual. From this point of view, critical factors that influence performance are individual perceptions, attitudes, motivations, values, mental health and self-actualization tendencies.

An advertiser attempts to influence both public knowledge and emotional reactions to a product (soap), an organization (St. Regis Paper Company) or an activity (salvaging aluminum cans). Exhortations, appeals to emotion, and the display of examples - all of these are efforts to change something within the individual, anticipating that that individual will thereafter act differently because of new understanding, perceptions and values.

An educator or social-change agent gives lectures, prints books, shows films and provides demonstrations in order to describe and show what is possible and desirable.

In a parallel vein, foresters and environmentalists with this orientation tend to study the characteristics of individual plants and species, and are concerned with plant and animal varieties that are disease resistant, hardy, fruitful and have high yields.

There are rich traditions and vigorous activities among those who attend primarily to the characteristics of the individual organisms they study. Psychologists with this orientation have much to offer us, and can provide unique and valuable insights related to the concerns of this conference. Most of us would agree that we need to encourage and support educational experiences which develop sensitivity to and concern for our immediate and global environments, and foster a sense of personal responsibility for the conditions of life.

Educational Implications of the Internalist Orientation

1. Choices. The humanistic psychologist would recommend that learners be given many opportunities to make relevant choices, to examine a number of alternatives and commit themselves to an activity or point of view, to have access to information on both sides of a controversy, and to be free to make their own choices. This would suggest that environmental educators display a range of possible policy decisions, and the realistic outcomes of each position (including the positions advocated

by their opponents!). Thus, a Nature Center might display both a polluted and a reclaimed body of water, with the costs (time, money, and talent) and benefits (beauty, use and health) of each.

2. Motives and Values. The cognitive or developmental psychologist would recommend providing opportunities to clarify individual values through repeated opportunities to examine an issue (with some inherent conflicts), take a stand on the issue, and then respond to clarifying questions in a non-punitive situation. Thus, a public appeal for incorporating new wood lands into a Federal Park might display the full range of options and, in a simulated setting, provide both the opportunity to make a choice and, then, a number of questions to explore and clarify the values and motives underlying whatever choice was made.

But it is not enough to develop a new strain of corn; we must also match the seed to an optimum environment of water, nutrition, sunlight and temperature. The performance of any organism is a function of both its internal characteristics and its interaction with its environment. Similarly, it is not enough for educators to try to change factors within individuals in their efforts to bring about substantially different performances, we must also design for appropriate individual-environment interactions.

The Interactionist Position

There are psychologists who emphasize the importance of the interaction of an individual with his/her environment over extended periods of time. They tend to explain human performances primarily in terms of the intensity and timing of three functions: the context or setting within which the person is performing (the stimulus conditions), the actions or performances demonstrated by the person (the behaviors emitted), and the effects or results that occur as a function of the person's behavior (the consequences experienced). Typical explanations that take this interactionist position might be: "Well, under those conditions, who wouldn't act that way?" or "His family arranged things and put strong pressure on him; when he acted appropriately, they gave him all kinds of rewards."

Foresters with this interactionist orientation would tend to assume a "managerial" stance relative to the environment. They would select and manage particular varieties of plant and animal life as appropriate to the local conditions; they would adjust the water, nutrition, regular care and harvesting in order to obtain the maximum yield from each species. If things were not going quite as the "manager" thought they should, he'd be apt to look for ways to modify the environment or the treatment he controlled, to optimize the species-environment interaction in order to obtain the desired performance.

Educational Implications of the Interactionist Orientation

1. Setting. The interactionist educator would recommend that the problem situation be clarified, that any setting or presentation emphasize discriminations between situations that should be attended to and other situations that should be ignored or avoided, and that the important features of the setting be made vibrant, intense and dominant.
2. Behavior. The person-environment educator would recommend that the potential learner be given many opportunities to practice desired performances within the appropriate settings, and make finer and finer discriminations concerning what behaviors go with what situations. Learning should be active, rather than passive; practice is an essential characteristic of learning.
3. Consequences. The interactionist would recommend that each performance be followed by an appropriate effect (a reward that balances the difficulties of the performances--neither too much nor too little). Research and experience have pointed out the value of controlling the time between a performance and its consequences--the time should be short and consistent during the initial stages of learning a new behavior, and longer and variable as the performance becomes more habitual and more proficient.

Here again, there are unique and valuable insights that can come to the environmental educator from assuming (at least temporarily) this interactionist orientation. If the results of his/her education efforts were not quite what they might be, there would be three kinds of things that could be modified: the situational stimuli provided the learner, the practice behaviors that were brought out during learning, and the kinds and varieties of consequences that were available as a result of different types of performances.

But, as before, even these two points of view are inadequate to explain or account for the full range of events which the environmental educator could adjust to influence learners' performances. There are also factors in the "external" environment which can be changed in order to obtain more desirable behavior.

The Externalist Position

Still other psychologists tend to think of human behavior as the outcome of many factors in the external, non-human world - such as the introduction of the electric light and the computer, the development of a private-vehicle rather than a public transportation system, and the invention of new pesticides. The "systems" psychologist thinks about human behavior as the result of the complex interactions among many different sub-systems (one of which may be an individual or group). No characteristic of any

single component or sub-system, no single relationship between components or sub-systems, nor any sub-set of the whole is determinative or predictive of the system's performance. Rather, all factors interacting over time (with feedback and time-delayed actions) influence performance. Fortunately for the educator, a large part of human learning can be accounted for by the effect of a relatively small number of variables: teachers' behavior, the quality and variety of the materials and facilities, peer influences on the learner and home- and work-environment factors.

Foresters and environmentalists with this kind of externalist-system orientation tend to think in terms of ways to influence population growth, adjust the tax structures, control capital investments in industrial facilities, pass laws for the control of pollution, and influence the building of new roads, parking lots and motels.

Educational Implications of the Externalist Orientation

1. Institutional Structure. The system psychologist would recommend restructuring the information flow and decisionmaking structures of organizations so that relevant data is gathered, integrated and displayed for the benefit of both policymakers and the general public which provides the resources and experiences the effects of those policies.
2. Modeling. The system psychologist would recommend that educators estimate the 3-5 factors that are most likely to affect the learner outcomes of primary interest, specify the functional relationships among these factors (as perceived by those within the system), and construct mathematically-based models of these factors and relationships. Such models would have the advantages of being public and thus open to examination and validation, being precise rather than ambiguous as are the "mental" models often held by those who make educational decisions, and being manipulable so that the probable effects of alternative policy decisions can be tested quickly and inexpensively on the model rather than in 'real life' situations where feedback is slow and costly.

An orientation which tends to perceive human behavior as the outcome of a complex network of factors, has much to recommend itself to environmental educators. When things are not going quite as we might like, this viewpoint opens up the possibilities for both new understanding of the dynamics of the system's behavior as well as possibilities for new approaches through policies, law, tax structures and organizational relationships. As has been pointed out many times (Laszlo, "World System": Braziller, 1973; Forrester, "World Dynamics": Wrigat-Allen, 1971), large complex social systems such as educational and governmental structures generally function in a way that is counter to our intuition about how they function; thus, all too often, the action we take to correct some undesired situation will either be unproductive or will worsen the very condition we sought to improve.

In Summary

There are many kinds of psychologists just as there are many types of foresters and environmentalists. No one group pretends to have a hand on the "whole truth" about human behavior. Each position provides some potential insight to a portion of the variability we all see in our own performances. Faced with our uncertain and turbulent circumstances, we need all the insight and wisdom available to move toward what might be possible for the human race. These three psychological orientations can work together without conflict, to enrich the understandings and expand the possible actions of environmental educators. In seeking to weave a new educational tapestry, the internalist may provide the threads of the warp, the interactionalist may provide the woof, and systematist may provide the pattern that makes the product both harmonious and beautiful.

RELIGION AND THE ENVIRONMENT

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How does religion contribute to our understanding of the environment? An obvious answer is that most religions either explicitly or implicitly present a philosophy of nature. According to Lynn White, Ian McHarg, and others, for example, the Judeo-Christian tradition has fostered an exploitative attitude towards the environment. In my own early work on environment, starting back in 1965, I was mainly concerned to develop a new theology of nature, one that would emphasize stewardship and the need to recognize and protect the values in nature that go beyond the purely instrumental value nature has for man.

The development of such a theology of nature will remain an important task for many years. But I am increasingly convinced that religion also has some important things to contribute to the environmental issue by helping illuminate how man understands himself and how this self-understanding affects his treatment of his environment. In other words, I now believe that the healing of nature will come about only with the healing of persons and the reshaping of institutions. Let me illustrate this point.

There is much evidence, I believe, that modern Western man has an overdeveloped need to be in control - of himself, of other people, and

finally of his environment. If we go back to the early years of the development of modern science, we find Descartes, Francis Bacon, Leibniz, and others insisting that knowledge gives man control over the world about him. With this power man is able to shape his world in new ways and thus increase his wealth and his chances for a good life. Indeed, the great success of modern science lies precisely in the greater control it gives man over his environment. I for one would not want to give up such a splendid achievement. The modern scientific method constitutes one of the great intellectual breakthroughs of all time. It has enriched all of our lives.

There is nothing wrong, then, with learning to control our world. But such an emphasis on control is only one way of relating to the world, and I would argue that we have distorted our lives by placing too much emphasis on it. In the Western academic tradition we have made such a lop-sided commitment to knowledge as power and control that we have become woefully deficient in other kinds of understanding, including intuition, aesthetic and religious understanding, and wisdom. Art, religion, music, and poetry at best play only a peripheral role in the total life of the modern university. Although we are able to deal brilliantly with man as to the object of his own study and scrutiny, when it comes to understanding man as subject, there are great problems. This is one of the reasons, for example, why the term "nature" is so difficult to deal with in our discussions of environment. Is man a part of nature? Obviously. Can man be understood fully within the category of nature? That question is much harder to answer. For instance, if he is fully a part of nature, is it possible for him to act unnaturally? Are not pollution, environmental destruction, etc., simply a natural manifestation of who man is? I wish we had time to look at some of the implications of these fascinating and important questions.

As Theodore Roszak and others have pointed out, the only truly "reliable knowledge" in the university setting is objective, analytical, empirical knowledge.¹ Our very use of language betrays our bias. We speak of hard facts, incisive arguments, the cutting edge of a discipline, attacking problems, a keen mind. What an incredibly aggressive view of the mind and of intellectual processes! It quite overlooks the fact that many of the most important and meaningful experiences of our lives are very soft, fluid, changing, subtle. Much of life can be understood only through art, and through myth, symbol, analogy, metaphor, and other tools of the poet and novelist. The mystic would say that there comes a point when all words become inappropriate. One can only remain silent.

Our lop-sided commitment to knowledge as control in the Western academic tradition means that already in our schools and universities we develop in our students an essentially manipulative orientation towards life. The easy way in which industry, technology, and the Army Corps of Engineers are presented as the environmental villains, and the university, pure science, and perhaps the Sierra Club are placed on the plus side of the environmental ledger, simply does not do justice to the world in which we live, for the fundamental orientation towards reality in the modern university is not essentially different from that of

industry. Both institutions are control oriented, both measure success in largely quantitative terms, both are intent on gaining power over nature, both are extremely aggressive in orientation.

Western man's compulsive need to exercise control over his world is perhaps nowhere more clearly seen than in his attitude towards death. His consistent refusal to deal openly with the meaning of his own finitude and mortality may well lie in the fact that death is one of the most obvious points where he is unable to maintain control over himself and his environment. Our culture has few of the rites of passage so common in most primitive cultures through which the adolescent learns to confront death - the male through the fabricated dangers of the initiation ordeal, the female more often through the very real dangers of childbirth. Rather, we have largely repressed the meaning of death and refuse to talk openly about it. We cover over its reality with elaborate cosmetics, embalming, soft music, and flowers. In contrast to most primitive cultures, where death was viewed as a rite of passage into fuller life, we see death as confrontation with nothingness and the abyss. Death is annihilation, the final destruction of our personal identity. It is indeed the self's ultimate loss of control.

This analysis necessarily has been brief. What, if anything, can we learn from it? Several things, I believe.

In the first place, our schools and universities will continue to foster an aggressive and manipulative mind set in students until we broaden our educational structures and operations to include ways of relating to the world other than that of modern science. As long as we insist on being in control, on gaining power over the world, the world will remain the object of our manipulation. That is one way of relating to the world, and an important way. But other modes of relationship would open up to us new forms of understanding. Contemplation, wonder, awe, silence, for example, all make it possible for the world to speak to us, to change us. The development of what theologian Bernard Meland calls the appreciative consciousness demands that we become less aggressive, more sensitive to the multitude of subtle stimuli from our environment, more willing to listen, more open to mystery.² Some kinds of knowledge are essentially subjective and are totally impossible apart from a context of love, trust, and the refusal to manipulate.

The move towards a broader concept of education probably would be helped by the realization that classical and medieval culture consistently held that ideas are not just for the sake of control but also for enjoyment. Our English word "school" derives from the Greek scholē and the Latin schola, terms which mean "leisure." School was the place where one enjoyed his leisure playing with ideas. In his book Leisure: the Basis of Culture, philosopher Josef Pieper points out that the Middle Ages distinguished between the understanding as intellectus and the understanding as ratio. Ratio was seen as "the power of discursive, logical thought, of searching and examination, of abstraction, of definition and drawing conclusions"³ Intellectus, on the other hand, was understood to be the power of direct intuition and was associated with

the passive receptivity of the contemplative. The concepts "intellectual work" and "intellectual worker" simply did not exist during the Middle Ages. Intellectus rather came into its own when man ceased trying to manipulate and control his world and simply remained open to the gift of inner illumination and understanding.

My plea is that our schools and universities return to this broader understanding of the life of the intellect in the recognition that empirical-analytical-objective thinking which gives us power over the world about us, albeit a rich and fruitful form of understanding, by no means exhausts the possibilities of the human mind.

Secondly, I do not think we will begin to understand the acquisitiveness of modern Western culture, the insatiable desire for more and more power and things, till we realize that we are probably, dealing with a compulsive and largely unconscious need to maintain control of ourselves, of others, and of the world about us. We see death as diminishment. One way to hold death at bay, therefore, is to keep growling: more and more, bigger and bigger. Don't count the cost. Don't ask what the effects will be for our children and grandchildren. Just keep expanding. So great has been our psychological need to keep growing, to keep producing more energy and things, that we simply have not been able as a nation realistically to assess the long-range implications of our economic activities. To doubt the value of growth as a national goal or to express uncertainty about technology's "limitless" ability to provide for our expanding "needs" is not just to question the conventional wisdom but is to speak heresy. It is to attack the efficacy of the cult, the power of the technological sacraments to continue to perform the miracle of transubstantiation, to multiply the loaves and the fishes, to improve, to perfect, to sanctify "undeveloped" nature. Such growth, of course, is no longer a rational procedure at all, but rather the result of a deep-seated psychological need to gain control over death, to create the illusion that we are more than limited, finite beings.

Americans are frequently called materialists. But I find that label singularly inappropriate. Rather than loving things, most of us simply use them as a means of hiding our insecurity in the face of death. My evidence is very simple. Witness how quickly things move from our forests, mines, and fields to our factories, our stores, our homes, our municipal dumps. There's a kind of obscenity about our flow-through, flush-down, throw-away culture. Incidentally, this is one thing we can't easily blame on Judaism or Christianity, for the Biblical witness on this point is very clear - in spite of many perversions throughout the history of the church: The world God created is basically good. It is God's intent that man love the earth, even though he must not love it inordinately and use earthly things to cover over his own inner emptiness. As theologian Joseph Sittler has said, God is the greatest materialist of us all, for, in the words of the priestly editor of Genesis, he not only created the world but also declared it "very good."

Finally, it should be apparent from what I've already said, that the environmental crisis will not prove susceptible to purely technological solutions, for it is essentially a crisis of man's understanding of himself. To be sure, new and imaginative technologies are sorely needed. Substantial changes will have to be made in our economic and political institutions. But until we recognize that man's spirit itself is the ultimate front line of the environmental crisis, we will continue to nibble away at the edges.

NOTES

¹Theodore Roszak, The Making of a Counter Culture (1969), p. 208.

²Bernard Meland, Higher Education and the Human Spirit (1958),
Chap. V.

³Josef Pieper, Leisure: the Basis of Culture (1963), pp. 26-29.

SIN, THE JUDEO-CHRISTIAN HERITAGE AND ENVIRONMENTAL EDUCATION

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The depths of human experience historically have been understood through symbol, myth and drama. The Judeo-Christian heritage is no exception with the Bible as the main source. The biblical drama of relationships between God and human beings begins with the primal myth of Creation.

Significantly, the generic people, Adam and Eve, are created to dwell in the Garden - an eco-system. It is a place of shalom (love, peace, wholeness), harmony and symbiosis. God is the owner, the Creator who makes it all possible, the Ultimate at the depths of existence. Adam and Eve have a definite place - a human niche in the ecology of Creation with a specific and unique role to play. They are stewards or the caretakers of the Garden, to tend, nurture and live in harmony with the oikos (world-house or ecology). Their job is building and maintaining the ecological community in order that all elements, including human beings, may become what God intends.

But in creating people God gave human freedom as well as other rather unique gifts such as reason, self-consciousness, comprehension of time and history, the ability to manipulate symbols, a high capacity for communication, the ability to order values, and a sense of humor. Radical freedom and these other human gifts are the source of human creativity as well as human sin.

The first sin was ecological! (Rolston) Sin, literally translated, is "missing the mark" of being human. Humans uniquely know they will die, and this knowledge coupled with human freedom leads to anxiety and restlessness. The mythological first couple were successfully tempted out of their ecological niche and its corresponding responsibilities. They sought to become God, to have power over the garden, to become superhuman, to regard themselves as their own end rather than as part of an ecological dynamic of means and ends. They sought to be more human through inhuman ends.

This root Sin is Pride (hubris), or the general inclination of all persons to overestimate their virtues, powers and achievements; and usually manifested in the will-to-power (Reinhold Niebuhr). Sin is the root cause of the environmental crisis from the Judeo-Christian perspective, and the environmental crisis is one pervasive form of the biblical/human drama.

The will-to-power, coupled with freedom, allows exploitation of the earth through the extension of human power by means of uncontrolled technology. Environmental ignorance and selfish blindness allow us to push our expansionist, short-range goals. The results are alienation, resource depletion, pollution, sickness, famine, war, and finally ecological collapse and death.

Sinful pride has another dimension. The majority of people do not have much power. They may follow and support the minority that do, or they at least feel helpless before them, but their will-to-power takes a different form as the masses seek to assuage their anxieties over inevitable death and powerlessness. They escape and deny their humanness, not by direct power, but by demanding satiation and evading pain and responsibility.

Hedonism through consumption gives the illusion of mastery over nature while avoiding responsibility, however temporary the illusion. Some carry this form of sin, the will-to-satiation and escape, to the extreme of sensate suicide (gluttony, alcoholism, drug addiction, sexual obsession, psychosis, etc.) or even suicide itself.

Either route, power or escape, results in the hell of alienation and separation from other persons and from that which fulfills humanness (God as love). The final outcome is unfulfilled death.

It is a spiral of sin at the heart of ecological dynamics that is at fault. Power-seeking is fueled by the greedy demands of the pleasure-seeking. Growth economics depends on the will-to-satiation expanding unabated, basing our well-being on the most ignoble human motivations. Those in power exploit our selfishness, and technology has allowed them to succeed quite well. This has hidden from us the knowledge that technological success in delivering the "good life" has been at the expense of the earth and its resources beyond the point where it can be maintained in the future. The vicious spiral builds and whirls in a synergistic and exponential fashion pointing to probable collapse, death and eventual restoration of the ecological balance (probably without human beings).

In the global village, these forces are playing out the human drama of sin in epic fashion. Fueled by hedonistic consumption and waste, the "industrial-expansionist system" (capitalist and socialist) seeks more and more power over nature through resource depletion and technology, leading to pollution, population explosion, sickness, war and collapse/death. Necessarily this also requires exploitation of the larger share of the world's people. Inequality, loss of freedom and eventual totalitarian control are also axiomatic.

In the developing "Third World," as well as for a large number of people in the developed world, this systematic exploitation and oppression leads to underconsumption (starvation) with resulting brain damage and sickness; under-utilization and waste of natural resources through imperialistic theft and inappropriate means of development; and revolutionary anarchy and war with all of its nuclear ramifications.

From the standpoint of the Judeo-Christian heritage, I would make three affirmations:

1. God is still God, and still owns and controls the Garden. Philip Slater points out that it is the height of individualistic folly (sin) to assume an environmental crisis. We have a crisis, but not God! God's creative processes move on, and the balance is being restored and will be restored. The Garden Earth will continue and prosper with or without us.

What we regard as an environmental problem (e.g. the energy crisis) is one of God's mechanisms for restoring homeostasis to the global ecosystem. Whatever environmental crisis there is for us, we are not called to "solve" it. God is already solving it, and we must beware that human environmental problem-solving can be another vehicle for ecological sin just as exploitive power and escape are.

The human problem to be solved is whether (and how) we will be part of God's solution, or will the ultimate solution be arrived at in spite of us, without us, or even through our demise? The hopefulness in this is that God has given us the freedom to choose. Yet it should also serve to keep environmentalists humble, and keep us focused where we can do the most good. As Pogo says, "We have met the enemy, and he is us." Whether we will choose to move back to our human ecological niche depends a great deal on changing our attitudes and basic values. As Pierre Dansereau says, "the quality of one's inscape determines the quality of the landscape."

2. From the Judeo-Christian viewpoint, JUSTICE is the priority human task if we are to ever achieve reintegration and harmony with our proper ecological niche. Just as Jesus and the prophets were on the side of the poor and oppressed, the environmental movement must be on the side of the world revolution that is seeking justice and quality of life for all.

3. The values arena is the best handle we have for action. We need heightened consciousness and broadened understanding of the dynamics

of human values interacting with the environment - both as to the present destructive interactions and the potentialities for positive interaction.

Conviction (awareness) of sin has been the traditional place one begins in the salvation process (reconciliation with God and unity with Creation). The major role of education, and environmental education in particular, in this clarification process should be obvious. We are gathered here this week to seek effective means for doing this.

Let us be mindful that it is no foreign ideology we oppose. We are seeking to find alternatives to what we have been taught are high ideals, worthy motives and good ends. As someone said, our task is to redefine what we have considered to be normal behavior up to this point. And we will be opposed by mighty entrenched vested interests.

Environmental education cannot save us. Our sin is so pervasive there is no way we can, by ourselves, get enough understanding nor enough will power to make the necessary changes. However, the Judeo-Christian faith affirms that we can move from awareness and conviction, where environmental education has a major role, toward surrender of our isolated independence and selfishness, and toward liberation from all that keeps us from fulfilling our human destiny. In the process of opening ourselves to liberation, we find the grace of God giving us unexpected and undeserved power to achieve the ecological health and wholeness we need and desire, to be reconciled with God and Creation.

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Recorder's Note: Rev. Steffenson directed his remarks to an elaboration of three models: a stylized ecosystem, a Judeo-Christian paradigm, and a Global Village model. The specific models to which he refers are appended to the following discussion.

"In the green area in the middle is a functioning ecosystem in balance with all of the things going on there that you see: Symbiosis, cooperation, the tendency to equilibrium, the food webs, the nutrient cycles, the balance and the harmony, - but - tending toward homeostasis.

"As we all know, for a lot of complex reasons, ecosystems get out of balance and they tend to either have too much of a good thing and you have the exponential curves going up with too much of a good thing (or) they become unstable though they still are viable. Then if there's too much positive feedback without negative feedback they go up at this rapid rate to the overshoot and collapse kind of behavior and then you have actually a new ecosystem evolving out of that. Or it can go the other way - too little of a good thing can lead to the same result.

"Often they are interrelated.

"This is not my area and I don't know how accurate I am in all of this but at least it's a place to start.

"And because everything is connected to everything else, as Barry Commoner says, we can use the same scheme, I think, to understand the Judeo-Christian heritage which is basically my assignment here.

"The primal myth of our understanding in the Judeo-Christian heritage is the Creation story. In the garden you have 'shalom' - this beautiful Hebrew word - one of the richest words in any language.

"Shalom, literally translated, is peace, but it is not just the absence of conflict kind of peace, it's full, prosperous, whole, balanced - all of these things coming into it - community - the Bible would call it Koinonia, the Kingdom of God - beauty. In the garden human species have a specific niche just like any other species. They are the stewards - the caretakers of the garden - the ones who are to help community - build community. The whole garden is in a process of becoming - moving toward human fulfillment - humanness - in all of the ramifications of what that means.

"Like any good country preacher, one sooner or later comes to the reality of sin - an old fashion word not used very much except by Dr. Karl Menninger, in a book that is selling widely now, (who) is, I think, bringing that word back into common usage.

"You run into the reality of sin - sin understood as pride, or as Reinhold Niebuhr puts it, the general inclination of all persons to overestimate their powers, virtues, and achievements and (is) usually manifested in their will-to-power.

"The refusal to be content in the human niche, and in this sense the first sin in the myth, the sin of Adam and Eve, was an ecological sin - to eat of the fruit of the tree of knowledge instead of being content in their niche. To try to become - to replace the owner of the garden - God.

"However, sin is not as simple as that - it's a very complex thing. Actually I find sin taking two forms and that's why I've got the two arrows going in the opposite way (referring to the model).

"Reinhold Niebuhr, whom I quoted, talked a lot about the first form, the will-to-power. It relates a lot to what Dick (Richard Baer) talked about - in our anxiety over death - the fact that someday we will not be. So we seek through the will-to-power more and more efficiency, we seek power and status, we have this control need. As a result we exploit resources, we find growing alienation and as we approach what Ivan Illich calls the 'boundary of doom' we get more and more ugly, we get more sick and we have things like war - finally leading to overshoot collapse and death.

"However, most people are not very powerful, most people cannot express this directly in that kind of will-to-power.

"Most of the people follow the other path (the second sin) the will-to-satiation. The way we deal with the anxiety over death is to try to escape the responsibilities of the niche - to try to deaden it, to try to get out of what it means to be human. So we have the phenomena of consumption, alienate from self, apathy, privatism, hedonism, the unconscious environmental degradation that goes along with that, escape - again more ugly. Sensate suicide is an extreme form: alcoholism, drug abuse, gluttony, sexual obsession. These are slow forms of suicide that people use who don't have the courage to get it over quickly. Psychosis and death.

"That's my understanding of the Judeo-Christian view in a diagrammatical form and it's not just on an individual level but on the "global village" level. We move very rapidly to a very epic playing out of this dynamic system.

"In the green area (referring to the model) you have an idealized utopia. It certainly is the vision of a worldwide ecosystem that is in balance, and of course I draw heavily here from the "limits to growth" systems model, an area where there's an ethic of enough, steady state world system, especially in the economic area, interdependent world order. 'Tools of Conviviality', which is one of Ivan Illich's terms, tools that are under personal control - rather than tools that control us.

"Appropriate design. I've been struck by how new the Brewster-Bollin Hall (dormitory) is - yet, how torn up it is. Which says something about the spirit of the people that have lived there, and I wonder how many psychologists, ecologists, educators, poets, artists and the students themselves were in on designing that complex. Inappropriate design!

"Interdependency. Telling me that even if we could become self-sufficient in energy resources that that would be an evil option from my point of view.

"Worldwide we tend to go in two ways - we have in the will-to-power the industrial expansionist system - both capitalist and socialist - fueled by the will-to-power with these kinds of trends: urbanization, centralization, the continual extension of man's own energy through technology even further and further. The overconsumption, the materialism, the exploitation, the waste, the resource depletion, the pollution, and as things go on - inequality, the loss of freedom, war and all of the things that go with that.

"Yet in the larger share of the world one of the major problems is not overconsumption - it is underconsumption. People are not able to get enough energy to exist let alone do anything creative. We have inappropriate development. We have exploitation and waste.

"Each of these sides fuels the other and what we have is a 'synergistic spiral' of sin - except that it is played out in a grand scale through political and economic structures in a very complex way."

Steffenson asks, "Can we be content with our human niche?"

Continuing: "I don't hear justice talked about very much when I go to environmental meetings, except at the Stockholm Conference where human justice was the central issue. Our world system is very sick and it will take much more than environmental evangelism and value massage to heal it.

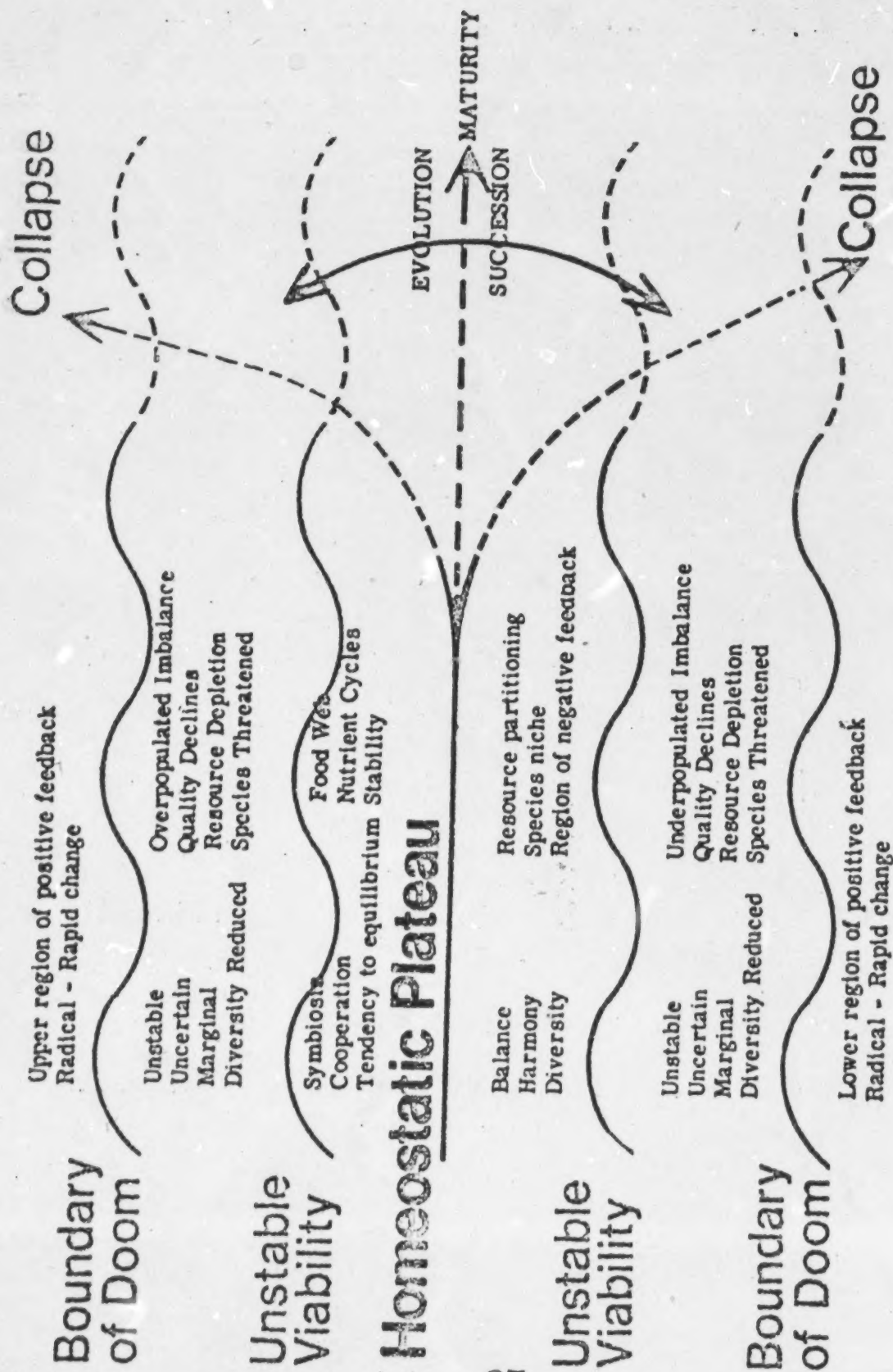
"Another affirmation is that conviction of sin traditionally has been where one starts in renewal or the salvation process - the awareness of what is going on.

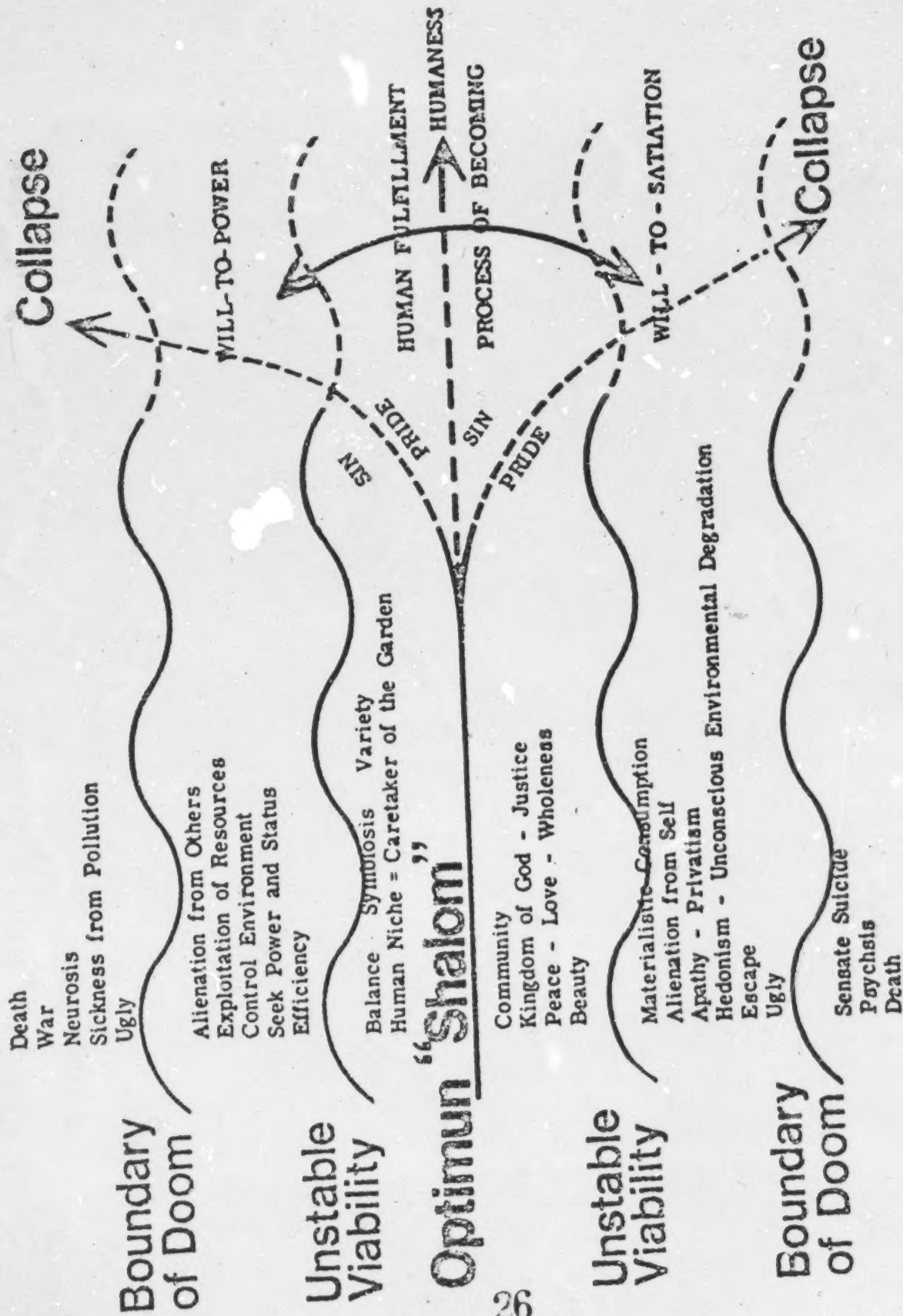
"Education, obviously, has a big role to play in the opening up of awareness, of understanding, of conviction. People then can begin to be open to the forces of liberation that will allow us to move out of this synergistic spiral of sin and maybe a little more back toward this green area of shalom.

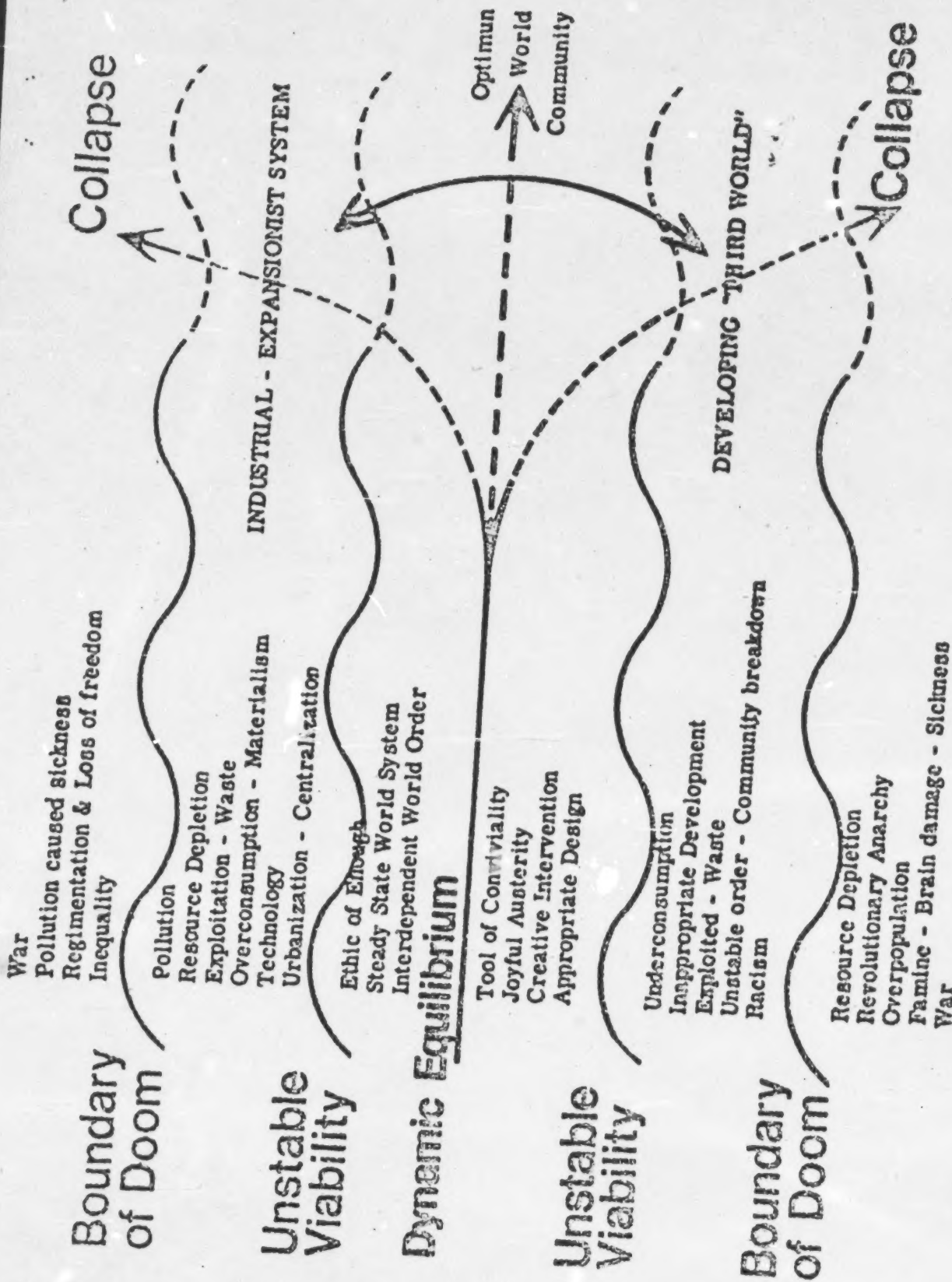
"Someone said that we have the 'Warfarin problem'. In a rat community if one puts out a good powerful poison it may kill one or two rats but the word gets around pretty fast and the rats stay away from it. Use a slow acting poison like Warfarin and the rats don't get the message and they keep eating on it and even when some of them die they don't get the connection.

"I think that this is where we are right now. Our systems have worked and they have worked well. What we are fighting against here are what we have been taught are good, true, successful, working kinds of things and we cannot understand that what has been successful in the past is not necessarily success for the future.

"We can keep chewing on the Warfarin until it's too late or we can begin to engage ourselves more and more in the process of opening up to what is going on, and as Gus (Dr. Root) says, what is going on is often counter-intuitive to what the conventional wisdom seems to think is going on."







DISCUSSION AND QUESTIONS

Question 1:

I am directing the question to Dave Steffenson and I want to support the term, that's a new term to me, and I use it in a different sense, but (it's) the term "Joyful Austerity." You really didn't use that term except that it was on the screen there if I remember.

I think we have a joint sin right now in this country and we are all a part of it. And that's the American economic system is working to "rip off" nature. I, myself, have been in the Capuchin Seminary. The Capuchin Franciscans follow the rule of St. Francis, they have a vow of poverty; and though I'm not a member of the order, I took, when I left the school, a personal vow of the "Spirit of Poverty," which is a different way of saying "Joyful Austerity," I think.

If we're going to go out and preach this gospel of the environment, and I think this is what we are trying to do here, that we ourselves have to live that "Spirit of Poverty" - we have to live in "Joyful Austerity."

It bothers me everytime I reread Lynn White's article in which he attacks the Judeo-Christian system; and I go back and see what did Christ preach, what did Christ say? And it was the "Spirit of Poverty" - the same spirit that moved St. Francis of Assissi.

I think we have to do more in this area getting people to tone down their needs or their acquisitiveness. I think all of you are working on that and I really want to support this idea and want you to discuss this a little bit further.

Rev. Steffenson:

The term "Joyful Austerity" I got from Ivan Illich. The book is in the bibliography and I think it is one of the most provocative books I've read in this area. But he, I think, got it from the Franciscans and, of course, he comes out of the priesthood.

In a class I taught last year one of the students, very environmentally oriented, said, "I can see the demands of the 'limits to growth' kind of model, I can see the change we are going to have to make. It seems grim. The kind of future that it seems to build in my mind is so grim."

The point that Illich and the Franciscans makes is that this austerity (and) we don't like that word - is a very joyful, rich, fulfilling kind of experience. The problem is that we have been so skewed to what Dick's (Dr. Baer) talking about - dealing with the anxieties, with the consumption - control kind of thing - what we just can't conceive in our imagination joy and fulfillment outside of that.

I think one of the vital responsibilities of environmental education is to build alternate models for the future that really communicate to people possibilities of life with all of these rich kind of things.

Dr. Root:

I would like to be a bit argumentative on this point. While I agree that this is a desired outcome - that individuals become sensitive to nature and that each person finds within himself a kind of athletic joy in limiting what one consumes - the question that I'm concerned with is under what conditions do people begin to develop that. It seems to me that it is an end point, and not a beginning point. People develop that kind of commitment under certain situations. They are not born with it. They begin to learn that, when they see others act that way; they may copy that in others whom they esteem.

We who are concerned with education and the design of large social environments need to know the conditions under which more and more people develop that. From my orientation, it seems important that we regard these new and sensitive insights as the end of our educational process and that we cannot count on having them in the beginning. I think we must assume that most people don't, and that today a smaller and smaller number of people are developing this mode of living.

In my own personal search for new meaning in my own life, I began as an "internalist" through meditation and prayer. Gradually, I have moved to the system orientation because it seems reasonable to approach the tasks of education from three points of view simultaneously: to modify the external environment so that the appropriate behavior is most likely to occur spontaneously, to modify the structures of our organizations so that people get rewarded for doing those things which are in our mutual best interest, and to conduct all manner of activities that will help people get the insights and develop the values that foster the creative growth of humankind.

Dr. Baer:

I wonder if I could comment on that Paul? This also ties in with something I said earlier. The ascetic tradition at its best does not focus on the joy or virtue of not having or possessing things, except as such not-having

frees one to have other things. In other words, owning too many things clutters our lives and cuts us off from other valuable areas of experience.

How can we be sensitive to the mystery of life, react with awe to the beauty of the world about us, be filled with joy, if most of the time we have to function as caretakers and nursemaids to a thousand and one irrelevant and more or less useless items such as garbage compactors and automatic popcorn makers? I just completed a move in a U-Haul truck from Richmond, Indiana to Ithaca, New York. It was a terrible experience. I more than once wanted to become "joyfully austere" and drive the truck - contents and all - over the nearest cliff, and then try to live more simply in the future.

The other point I would like to make, Dave, is that I do not think evangelism begins with the conviction of sin. That's a distortion of what Christian evangelism is meant to be. The genius of Biblical religion is precisely that its primary focus is not on sin but on the grace of God, on his love, on the fact that life is good and the future is open-ended. To be sure, the Bible also talks about sin, but it is always a secondary phenomenon. Sin is the refusal to accept life as a gift and the insistence that we can secure our lives on our own - through acquiring more and more power and possessions and status.

Most environmentalists talk too much about sin. That is, there's too much talk of pollution, ugliness, deterioration, what's wrong with the environment. Certainly, all of these are important issues, and we can't ignore them. But we don't really succeed in getting people to change their lives by all this gloom and doom. There's a good deal of psychological data that people seldom change in significant and lasting ways in response to feelings of guilt. Rather, they change in response to a positive vision of an alternative future.

Thus, we ought to stop talking mainly about what's wrong with the environment, and start dreaming and thinking and talking imaginatively and joyfully about what could be right if we did things differently.

Let's enlist the help of the artist, the poet, the novelist, the scientists, the planner to help us envision a different kind of future. We need to dream new dreams, and all of us - not just the planners - need to get into the act. All of our dreary preaching about ecological disaster isn't going to change much. Except that it will make us a bit more unhappy.

Question 2:

How about the time separation of people from land? Doesn't that account for part of the loss of respect for, and care of, nature? Will the affluent society cause a return to the nonmaterialistic approach to life?

Dr. Baer:

It is sad that we have lost touch with the land. Yet, on the other hand, those of us who are nature lovers should not forget that some people really love the life of the big city, including New York.

Many of us are really snobs about the pastoral and the wilderness as over against the city. We need to try harder to understand what other people like about the city.

Some of our zoning regulations have probably led to abuse of the land and have also resulted in widespread injustice. We need to rethink this area too.

In terms of education, we need to find ways of helping people get back in touch with the land and also with their own feelings and their own bodies. My guess is that these issues are closely related.

Comment from audience:

I was going to respond to Dave Steffenson's response to the first person in the back who said that he used to be a member of the Franciscan community. I wish he would stand up. I am a member of the Franciscan community myself and Lynn White's assumptions are being challenged by a number of Franciscan theologians. There is a book recently published by the Franciscan Press entitled "St. Francis and the Environment," which knocks Lynn White.

I am presently working on a dissertation at the University of Wisconsin, Madison on the same subject.

Question 3:

Dr. Root, in your analysis breaking psychology down into three categories, is there a fourth one or does it fall in one of the categories you had already mentioned - and that is the generalist?

In the practical situation, those of us who are out in the field have to be generalists. We don't know enough of any of the three areas to be specialists. Yet in the practical application, we have to know a little bit about each of the three areas, - as well as the political implications, the economic implications, the social implications - and try to apply what we know.

I would like you to comment.

Dr. Root:

I couldn't agree with you more. The very practical person that is out in the field, such as the parent who is trying to raise children, the teacher who is trying to educate people and the politician who is trying to change society, is better and better off as he knows more of multiple positions. No one of these positions tends to say that it has a handle on the truth. Each one sees through a different window. Each can contribute new insights and action recommendations.

The more we understand of these different positions, the more effectively we can function. The generalist is that kind of an individual who draws from everything he can and tries to bring it together in a useful framework to guide what he wants to do.

I began my professional career as a tool maker and my own efforts, my own precision at the task, was what I paid attention to. I became an engineer; I became a manager of engineers; I became a psychologist; and now I'm kind of a theorist and my wife says I don't do anything well anymore!

Well, now I find myself trying to understand why all kinds of things happen, and that's kind of hard to live with, sometimes. When I saw and heard some of the things that ex-President Nixon was doing, I was more interested in trying to understand the situations that might lead him to act that way - and that was uncomfortable for my very politically oriented friends who have strong tendencies to take a stand and act. And that's good too. But out of the kind of broad, generalist understanding that you seem to be looking for - understanding based on many different points of view - can come the greatest wisdom.

Openness to alternative points of view and to the possibility of an understanding that will never be complete - the more you have of these, the better for us all.

Question 4:

Rev. Steffenson, why isn't it our job to restore the earth? Aren't we God's caretakers and custodians of the earth? You mentioned human justice as important. How about justice for plants and animals?

Rev. Steffenson:

I didn't mean to imply that it wasn't our job to restore the earth. I was trying to get away from the kind of counter-arrogance that you sometimes find; i.e. "we are doing battle against those bad polluters and exploiters and we are going to save the earth." I think that's another form of sin.

On a more modest level, part of going with what God is doing to restore the earth is to be able to discern what is helpful and what isn't - to have the "systems" point of view. To know when to make little kinds of changes that will have profound effect.

But I think to go into it with the idea that our job as environmentalists is to save the earth is to really go at it in the same kind of spirit as those who are out to destroy the earth.

I was calling for modesty because, as the questioner asked, I said the human niche in the world ecosystem is that of caretaker - as stewards. I do not believe that humans are simply another species - (though) in one sense they are - in another sense I think the Judeo-Christian heritage affirms that we are special in a lot of ways. But being special demands so much more of us.

The covenant relationship with God in the Old Testament and the reconciliation of God and being God's people as seen in the New Testament - this is a very special relationship but it is one that carries tremendous burdens. I was calling for more of a modesty here.

The second part of that question - justice for the earth: Dick [Dr. Baer] and I went to a conference where we went around and around on that - that's a very complex question.

'Justice' and 'Rights' are technical, legal, ethical kinds of terms and they are normally applied to human spheres and it's a very controversial subject among ethicists as to whether nature has rights, and it's back of many legal battles in courts.

I think I would affirm that nature and the world has its own integrity and that in itself is quite important. For the time being (though) I would rather talk about rights and justice more in the human sphere and the way we relate to nature is certainly part of that.

Mr. Mehne:

Unfortunately, we have time for only one more question.

Comment from the audience:

I listened to what Dick [Dr. Baer] said about word power, and for the first time when George Howlett talked about "Joyful Austerity" and I was listening to what was happening up there [the podium] I understood austerity, except that I spelled it a w e s t e r i t y, and I think that if you wrote it down and looked at it that way for a while all kinds of meaning comes out of it.

Mr. Mehne:

We have succeeded in this morning's symposium if the number and complexity of all our questions has increased. It is our hope that these questions will initiate discussions in the conference sessions which follow.

I would like to thank you three gentlemen, it has been an outstanding session.

Recorder's Note:

At the symposium's conclusion, conference participants had the opportunity to submit additional questions and comments. The panelist's responses appear in the following section.

SECTION 2: QUESTIONS SUBMITTED TO THE PANELISTS AFTER THE SYMPOSIUM'S
CONCLUSION

Dr. Augustin A. Root
Syracuse University

Question 1:

Why did you leave out one of the most important categories - the generalist - which most of us are? Most of us do not know enough about any of the three types of persons you described, so we try to know a little about them all.

Dr. Root:

I have two kinds of responses to this kind of a question, and I'm not particularly pleased with either one because it's all too easy to misunderstand the intent behind my response.

First, I'm impressed by the person who is truly reaching out to get greater understanding about what's happening around him/her, and is eagerly looking for all of the help available from any source. But, at the same time, it's hard for me to express that positive reaction to the "generalist" when I have an equally strong, parallel reaction.

Second, I'm distressed by someone who tries to lift only one educational concept out of the whole network of ideas which have given that concept meaning and integrity, and try to "apply" it. Tragic results have been achieved by persons who (with the best of intentions) have tried to apply concepts like "behavior modification" or "psychological modeling" without bringing along the other concepts which provide substance and strength to the principle. The sad thing is that, often, the practitioner decides that "behavior modification" is no good because it didn't work in his case the way it was reported to have worked in other situations.

I have no argument with the person who honestly admits that his style is to "muddle through" and do the best that seems possible in any situation. On the other hand, I get strongly irritated by the person who tries to justify a perfectly normal pattern of behavior (because we're all ignorant about many of the things on which we have to make decisions and act) and even takes some form of pride in being a "generalist" or in being "eclectic."

In summary, I admire the honest human who acts in full awareness of his areas of ignorance, who seeks all the help that's available, and who is open to his own errors and limitations. But I abhor the person who seeks to make a virtue out of scattered bits of uncoordinated information.

Question 2:

I agree that systems function in ways that are different from what our intuitions would suggest. I'd like to hear about more examples.

Dr. Root:

Let me suggest three situations in which I have observed this "counter-intuitive behavior" in social situations. In all three, the persons involved were experienced and wise in many of their daily functions. In these situations, their prior learning led them to do things which achieved the opposite effects from what they wanted.

In a family situation, a five-year-old child was becoming increasingly difficult to handle. The two older children had come along fine, but this boy was beginning to revert to baby talk, and was developing temper tantrums. When these distressing behaviors occurred, the parents took extra time and care to deal with them. What they failed to realize was that their extra attention followed the undesired activities; with help, they began to realize that this extra attention should be given to the small evidences of mature and adult behaviors that did occur from time to time. In spite of their "natural" reactions, they learned to pay the minimum amount of attention to infantile behavior that was required to be sure that no permanent damage was done. Within three months, a complete change of family activities was observed.

In a professional college, several faculty members were concerned about the quality of the work being turned in by the students, and began to increase their efforts to clarify the standards for professional performance, and spent long hours evaluating student projects and giving them detailed feedback. In spite of these massive efforts, things just seemed to be getting worse. Working with a part-time consultant, they developed some simple techniques of having students grade each other's work, using a single-sheet grading guide worked out by the faculty. The faculty did a spot check on only 10 percent of the projects, and agreed

to review any evaluation which was felt to be unfair. There was an immediate improvement in student performance, and a steady growth toward responsible professional behavior in the students, and much more time available to faculty for personal interactions with students.

A School of Engineering wanted to improve the quality of its basic introductory course. A massive two-year effort produced new instructional materials, programmed texts, new problems for homework, new formats for lecture and discussion groups. Students did learn more in the same length of time, but many felt that the effort wasn't balanced by the change in outcomes. In a parallel situation, the same old material was used but students were asked to predict their own performance and their "pay-off" was a function of both their actual performance and their predictions. In addition, faculty members learned a few new skills for relating personally to students. Both learning and student attitudes increased sharply, with very minimal investments of time and money.

Question 3:

Can one be a "systematist" without being an "internalist?"

Dr. Root:

Certainly. One can draw the boundaries of the system to be considered in any way that is relevant to the problem being considered.

Internalists draw a "system" boundary around the skin of the individual, and account for a portion of the person's performance in terms of factors within the individual.

Externalists draw a system boundary around sets of external factors that appear to offer explanations for human performance that are useful - even if they don't account for all of the variance in human behavior. For

example, some would say that the number of books in a child's home is a better predictor of reading ability in the third grade than any measure of a child's IQ.

On the other hand, most of us would agree that an educator who can function effectively as both a competent internalist and a capable externalist would be dealing with a larger number of factors that could be brought to bear on the quality of the life we are trying to foster.

Dr. Richard A. Baer, Jr.
New York State College of
Agriculture and Life Sciences
Cornell University

Question 1:

How about time separation of people from land - doesn't that account for part of the loss of respect for and care of nature? Will the Affluent Society cause a return to the non-materialistic approach to life?

Dr. Baer:

I'm not quite sure what you mean by "time separation." If you mean that our lives today are more determined by the mechanical clock than by the rhythms of our bodies and of nature, then I would agree that this indeed probably does result in a loss of respect for and care of nature. As the clock increasingly controls our lives, we must train ourselves not to listen to what our bodies tell us or to what nature may be saying to us, for instance, through the changing of the seasons. One can also see this in the way in which the surveyor, armed with his plane geometry mentality, marched relentlessly across the north American landscape, trying to force all of the irregularities of nature to fit his logical way of thinking. Thus, fields were not planned on the basis of the natural slopes, drainage patterns, various types of flora and fauna, but rather were determined almost solely by the grid pattern of the surveyor.

You also ask: "Will the affluent society cause a return to the non-materialistic approach to life?" That's hard to say. Personally, I doubt that it will, for there is little evidence that having more things in and of itself causes a person to lose interest in things. Indeed,

much of our acquisition of power and things is psychologically quite compulsive. Many of us try to hide our inner insecurity by amassing more and more power and wealth. Thus, I believe we will become less materialistic only when we come to peace with our inner selves. Then we no longer will so desperately need the power and things we now seek after. For a number of years it appeared that our young people were less attached to things than were their parents. This seemed to suggest a new trend. The latest word on the current college generation, however, is that they are once again placing career, monetary reward, and security above most other values. So it's hard to tell just what the future will be like.

Question 2:

As a teacher, I feel that my students don't think that they have "gotten their money's worth" unless they go home with some new fact or species name. How do you get people to accept that they have "gained" something simply by enjoying a quiet walk in the woods, or by smelling a flower? Would like further clarification on how fear of death is causing our drive for knowledge, power, etc.

Dr. Baer:

We live in an excessively goal-oriented society, one dominated by the work ethic. In our colleges and universities knowledge is seen as power, that which gives us control over the world about us. To learn something's name is to gain power over the world. In this sense your students very accurately reflect the dominant values of their society. It's hard to say what it will take to bring about a fundamental change in values, one that would permit us to enjoy nature as well as to control it. Some of the large folio-sized volumes put out by the Sierra Club with photos by Ansel Adams, Elliot Porter, and others have helped me a good deal in making this transition. Many people are helped by art, poetry, and music.

Religion may also enable us to recapture a sense of respect for nature and a feeling of awe and wonder. I often think of the first sentence in the Westminster Shorter Catechism: "The chief end of man is to glorify God and to enjoy him forever" (italics mine). Prayer, praise, festivity, and celebration essentially are activities full of meaning but have no particular purpose. Romano Guardini, the Roman Catholic novelist and literary critic, has argued that the liturgical worship of the Catholic Church, analyzed according to its form as over against its content, is far sooner a kind of play than it is work. "The liturgy," he writes, "is life pouring itself forth without an aim, seizing upon riches from its own abundant store, significant through the fact of its existence. ...It has no purpose, but it is full of profound meaning. It is not work, but play....It is in the highest sense the life of a child, in which everything is picture melody and song." A little later Guardini concludes that "the soul, must learn to abandon, at least in prayer, the restlessness of purposeful activity; it must learn to waste time for the sake of God." For a society as work-oriented and goal-oriented as our own, such words as these may have more than casual meaning.

In the second part of your question you ask for further clarification on how fear of death is related to our drive for knowledge. As a vital belief in life after death was lost in the Western world, more and more people came to see death as that which robbed them of life. Death is the confrontation with nothingness and the abyss. Death is diminishment. Thus one way of warding off death is to acquire more and more things and more and more power. Much of this, I believe, happens on an unconscious level, thus is very hard to deal with directly. I'm not sure one can "prove" the truth of this interpretation, but at least it may get us started thinking about the problem.

I am told that there are tribes in Africa where most of the work is done in three or four days a week, and the rest of the time is used for play and festivity. One might ask why it is, then, that in our own society of abundance we work as hard as we do. It would seem that work for most of us involves more than the satisfaction of certain basic needs. For many, work appears to be a means of justifying their basic existence - an attempt to prove to oneself, to the world, perhaps even to God that one really is a worthwhile, valuable person. Perhaps it will be only as people learn more about the gift character of life - what the New Testament means by the term "grace" - that they will become free from their compulsive work orientation. We could learn something from the ancient Hebrews at this point, for in a society that was as near the subsistence level as their own it is amazing that they took the risks of observing the Sabbath. That is, they dared to set aside one day of each week when no work was to be performed. In a very basic sense this involved a fundamental affirmation of the goodness of life, including the belief that life at its best must involve such non-utilitarian values as praise, leisure, and celebration.

Question 3:

How can environmental educators help us to develop a more healthy attitude toward death?

Dr. Baer:

That's a tough question. Next to the thought of God, the thought of death may be the most difficult of all thoughts to think. Many argue that we must come to see death as a purely "natural" part of life. I'm not so sure. I suspect that death will always remain problematic for most human

beings, if for no other reason than that we can imagine ourselves living beyond death, or perhaps living indefinitely, i.e. not even dying. There seems to be something in the human being that is meant for eternity. At least many people in many different ages and many different cultures have felt that way. At the very minimum, I would hope that we gradually make it easier for people to talk about death. The work of psychiatrist Elizabeth Kübler-Ross has contributed much to our understanding of death (cf. her book On Death and Dying). Also quite a number of colleges and universities have instituted courses on death and on the process of dying. Probably we would do well to change some of our funeral and burial practices, particularly our attempts to hide the reality of death. I'm not sure just how much the environment educator can do. He may well have to turn to the poet, the artist, the novelist, the psychiatrist, the priest, the philosopher, and the theologian for help. Perhaps he can make a start by facing more squarely the meaning of death in his own life.

Question 4:

How can a union or communication between East and West help our environmental problem solving? Do you think a blending of the two cultures is the road to a better environmental understanding? You speak of man's view of death as an end. Do you feel that man needs a belief in afterlife to reach a contentment when alive, including an environmental understanding and contentment? Do we need God?

Dr. Baer:

I don't believe a union between East and West is possible, at least not on the level of religious beliefs and practices. But a good deal more communication is both possible and desirable. I believe we have much to learn from Eastern religion and philosophy. For example, Taoism and Zen Buddhism have much to teach us about sensitivity to nature and sensitivity to our own bodies. They can teach us a good deal also about

silence and the contemplative life. In both of these religions man is seen much more as a part of nature than as someone who stands above nature and dominates nature. I think it would be valuable to give students in our schools and colleges more exposure to Oriental art, much of which reflects this more holistic understanding of man and nature.

On the other hand, I do not think a blending of the two cultures is possible or is "the road to a better environmental understanding." The differences are too fundamental for this. Western religion, for example, has a very different orientation towards man's life in the world. With the de-sacralizing of nature which took place in ancient Israel and among the ancient Ionian Greek philosophers, man came to view nature in a new way. Israel developed a strong sense of history and with it a passion for justice and a deep concern for man's life in the world. Religions which worship nature tend to be tied to the status quo, whereas Judaism and Christianity, with their highly developed sense of a transcendent God who stands above nature, tried to change society in such a way that justice would be achieved within history. I doubt that we in the West would be willing to abandon our historical consciousness, which grows out of the biblical tradition, or to suppress analytical and abstract thinking, which is our heritage from Greek philosophy. Both of these were important for the development of modern science. I do not see how modern science could have developed within the framework of Taoism or Zen Buddhism. Modern science and technology not only have enriched our lives but also have provided us the capability to destroy ourselves and ravage our planet. Nonetheless I do not foresee the West turning its back on science and technology or completely repudiating the philosophical and theological beliefs which have facilitated their development.

We in the West will have to infuse new meaning into certain minor themes within Western philosophy and religion and at the same time de-emphasize other themes which have lead to environmental exploitation. Thus, the image of man as lord of creation, the one who exercises dominion over the earth, probably will have to be de-emphasized while at the same time we attach greater importance to the image of man as steward or caretaker of nature or the image of man as wondering onlooker. There are passages in both the Old and New Testament, that reflect a good deal of respect for the created world. In the first chapter of Genesis, for example, the refrain "and God saw that it was good" is used frequently in relation to the created world. In the prophetic books we read of the renewal of the earth as well as of the restoration of mankind. In Romans 8, the Apostle Paul refers most sympathetically to the travail of the created world, which along with man, awaits its own redemption. Rather than seeing nature as antithetical to grace, as much of the Western theological tradition has done, we can learn from Eastern Christianity, where nature and grace have been seen as complementing each other rather than working against each other.

In the second part of your question you ask whether belief in an after life is necessary to reach contentment in this life, "including an environmental understanding and contentment." Many people apparently have reached great contentment without such a belief, but my own conviction is that a vigorous belief in life after death does add an important element to the meaning of life here and now. If this present life is an introduction to a much fuller life after death, then it would seem that we need not try to squeeze so much satisfaction and meaning out of what now is. We might not feel such intense pressure of time and space, but

would rather risk leading a far more leisurely existence. I think this could have some important implications for our relationship to our environment.

You ask "do we need God?" Yes, I think we do, but I will not try to say why in twenty-five words or less!

Question 5:

The mystical outlook of humanities is very important, but how is one to get it more than skin deep? To not distrust intuitions, shouldn't we first learn what awareness of such means? In terms of reality and responsibility to the short time that the Blueprint for Survival accords us, can a stable, viable society be produced?

Dr. Baer:

I have a somewhat ambivalent reaction to your expression "the mystical outlook of humanities." In many colleges and universities today the humanities rely almost as extensively on an analytical and descriptive methodology as do the natural sciences. I think that's unfortunate, for it tends to de-fuse the existential power of works of literature, poetry, and art. Too many doctoral theses today in history, religion, philosophy, and literature, have adopted an analytical-quantitative approach similar to what would be appropriate to the sciences. As theologian Bernard Meland has pointed out in a number of his writings, we need to focus more on developing the "appreciative consciousness." In so doing we would not attempt simply to analyze and describe works of art and literature but to feel inwardly something of their depth and power. Are we willing to let literature affect not only our thinking but also our living? In his book The Making of a Counter Culture, Theodore Roszak argues that we must learn to subordinate the question "How shall we know?" to the more existentially vital question "How shall we live?" (p. 233). He writes that "to ask this

question is to insist that the primary purpose of human existence is not to devise ways of piling up ever greater heaps of knowledge, but to discover ways to live from day to day that integrate the whole of our nature by way of yielding nobility of conduct, honest fellowship, and joy" (p. 233). We need teachers in the humanities who are not only technically and analytically competent but who are willing to risk living out their ideas as well as thinking them.

Yes, we will have to become more deeply aware of what our intuitions mean. Present educational structures and operations systematically teach our students to distrust, to root out their intuitions. An interesting experiment currently is going on in the Medical Faculty at McMaster University in Hamilton, Ontario. Teachers there came to realize that most of their graduates were not doing medical diagnosis in the way they had been taught, namely to gather all the data and gradually to move analytically towards the proper diagnosis. Instead, most students quickly intuited what was wrong with the patient, and then, if they were careful practitioners, did the necessary lab tests to prove or disprove their diagnosis. Now the Medical Faculty at McMaster University, in effect, is teaching their students how to have better intuitions, more quickly, more often. I might also add that most patients probably know a good deal more about what is wrong with them than their physicians realize. Few physicians, however, have been trained really to listen to what their patients tell them. Even fewer know how to encourage the patient who does not talk easily to express himself more clearly.

Do we have time to create a stable, viable society in the short time left to us? Who can say! I dare to believe that we do, but that is more

an expression of personal faith rather than any convincing interpretation of the data at hand.

Question 6:

The difficulty may not necessarily lie in our philosophy of science, but more so in the layman's interpretation of that philosophy. Scientists, in looking at nature, do not have to look at it in terms of control, but rather for explanation. It is usually societal demands that look to science for control rather than explanation. I believe that most environmental scientists today are looking for ways to live within nature, rather than to control it from without. Isn't limited consumption, a kind of control?

Dr. Baer:

No, I do not think it is merely society which looks to science and technology for control. Control is built into the whole scientific enterprise, and, I might add, is not in my opinion necessarily a bad thing. To be able to control nature makes it possible for man greatly to enrich his own existence. My complaint is that we have become lopsided in our fascination with and commitment to control. The point I am making about science is that to be able to name things accurately, to be able to capture them in mathematical formulae, is indeed to exercise control over them. It is, to be sure, a form of intellectual control, but it nonetheless gives man great power over the world about him. For example, it makes it possible to predict what will happen in the future, at least within systems which we understand sufficiently. Let me repeat, I do not think such control is bad. My point, rather, is that we must develop other ways of relating to the world about us.

Question 7:

Some writers have correlated man's acquisitiveness with his desire for security. For example, the caveman could measure his security in

terms of the amount of wood he could gather to feed his fire to keep away wild animals at night; the early agriculturist in terms of the amount of food he could store against the cold winter. Thus, today owning things is a continuation of the fear man lived with when survival itself was questionable. Even though we no longer live in scarcity we are acculturated with this obsession. Man's multiply and subdued attitude is therefore a matter of fear prevention and a search for security. Isn't it?

Dr. Baer:

Yes, I think man's acquisitiveness is related to his desire for security. And, to some extent, to have more possessions and greater power may indeed make our lives more secure. I might add two things, however: (1) Carried too far, this very drive for security may finally make one's life more insecure. Thus, for example, we might imagine your caveman becoming so compulsive about collecting wood that he would deplete himself physically and psychologically and thus become more susceptible to accident and disease. Or he might become so tired that he would be less able to defend himself against predator animals when the necessity arose. Our current preoccupation with nuclear weapons is an analogous case from our own time. In our compulsive need to establish our own security we have amassed such a huge and dangerous arsenal of weapons that over the long term we may have made our existence far more insecure. We may destroy ourselves in the attempt to secure ourselves. One sees something of the same mechanism at work in our indiscriminate use of pesticides and other chemicals. In trying to gain short-term security we may so damage our ecosystem that we will make life very difficult in the future. (2) It is also important to remind ourselves that security is an instrumental value, not something valuable in itself. One can become so preoccupied with security that he loses sight of joy, spontaneity, leisure, play, conviviality, and other important values.

All of life involves some risk taking. To become so wrapped up with our own security that we are no longer willing to take risks may make of us truncated, cautious, pathetic people. Jesus was right, I believe, when he said: "He that saves his life will loose it, and he that looses his life will save it." Kazantzakis makes much the same point in his novel Zorba The Greek - as do many other modern authors.

From a religious perspective I would say that man's attempt to secure his life on his own is very close to what the Bible means by the term "sin." The New Testament scholar Rudolph Bultmann has some fascinating things to say on this matter in his book The Theology of the New Testament. Only when one is willing to "let go" and cease trying to establish his life on his own is he free to discover some of the deeper resources for living. In religious terms, this is another way of saying that one is not justified by works but rather by grace. In a culture as deeply bound by the work ethic as our own, that is a hard lesson to learn. But apart from such a relaxing into the basic goodness of life, living will be a dreary matter at best for most of us. And we probably will still feel very insecure, in spite of how much "objective" security we may have. In the last analysis then, security has less to do with objective circumstances than it has to do with how much at home one feels in the world. Thus it is fair to say, I think, that many primitive peoples who live close to the brink of starvation throughout most of their lives feel far more secure than do most contemporary Americans. Most of us, however, do not have the necessary modesty to open ourselves to what such people may be able to teach us about living. How unfortunate!

Rev. Dave Steffenson
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Question 1:

Why isn't our job to restore the earth? Aren't we God's caretakers and custodians of the earth? You said that the earth is being saved. Where is the evidence?

Rev. Steffenson:

The earth is an ecosystem much like any other, though on a macro scale. What we consider to be environmental crises are part of the process of restoring balance, equilibrium and symbiosis to the world system. However, that restoration can be gradual and humanly rewarding (choosing to reduce Western consumer demands and energy consumption) or we will find the restoration catastrophic (world famine due more to an evil economic distribution system than lack of food and the population explosion). No matter what ways humans choose to respond to the environmental crises, "Mother Nature" will restore the balance though we will either be destroyed or enhanced as a human species depending on our values and ethical choices.

Certainly we are the caretakers and stewards of the earth. I said that the human ecological niche in the Garden of Eden was precisely that, and the first sin was ecological when humans sought to be God and refuse that niche in life. However, we must beware that even the best intentioned actions for the environment can be vehicles for human sin and pride. The caretaker role is one for extreme caution even when we mean well because, as Garrett Hardin says, "we can never do only one thing." Any

human intervention in nature, or in human society for that matter, has latent and hidden consequences that sometimes take years or decades to be revealed. The "children of light" are often used by the "children of darkness" for evil ends (e.g., American corporations are delighted to enlist us in anti-litter or anti-pollution campaigns that often obscure the deeper defects in the industrial-expansionist system). And finally, as Reinhold Niebuhr said, most of the evil in this world is done by good people who don't know they are doing evil. It is very difficult to recognize our own participation in the evil systems of this world, especially when we are on the side of righteousness (environmental education and action).

After that caution, however, I believe as stewards and caretakers, we can participate in "creative intervention" into the environment and even improve on it in partnership with God as Rene Dubos envisions in his writings. Ian McHarg also speaks of "design (human) with nature." I would not agree with those who see human beings as a parasitical or weed species despoiling the earth. If we can tackle our religious problem of sin, perhaps we can return to our caretaker niche and be in tune with the restoration processes going on all about us rather than at war with them as we are at present.

Question 2:

Why would it be an evil thing if we solved the energy crisis and became independent and sufficient in energies?

Rev. Steffenson:

The energy crisis cannot be "solved." It is global fact that the day of cheap fossil fuel is gone, and it will not be plentiful too much

longer, Our whole economic system, in fact the fabric of our modern society, rests on fossil fuel - especially oil. The basis for our system is about gone since we have treated fossil fuel, as E. F. Schumacher says, as income rather than capital. The only solution is to relate differently to our energy supplies and build an alternative style of life. Efficient nuclear energy is extremely dangerous and should not be built, solar and wind power hold only long-range hope, and nuclear fusion is probably technologically far off in the future, if at all.

What I meant was that it would be evil to pursue the stated goal of both the Nixon and Ford Administrations of the U. S. becoming self-sufficient in energy, especially fossil fuel. This is true for three reasons:

1. Many experts say it isn't possible, and the Administration now has pushed the date to 1985. If it is possible, it will be at a tremendous cost, both in dollars and in environmental degradation - especially in the West. And if it is achieved, it will still be only for the short run.
2. The world system's study of "The Limits to Growth" show the truth of system's dynamics that if you embark on extraordinary means of shoring up an unbalanced system and postponing the "overshoot and collapse" outcome, you only ensure that the eventual collapse will be much more catastrophic. The only alternative is a gradual shift to another pattern of balanced living. The Administration goal of self-sufficiency only ensures increased long-range misery in direct relation to its success in the short run.

3. Such a goal violates both ecological and ethical principles.

A sound ecosystem is diverse and interdependent rather than imbalanced and dependent on a few vulnerable resources.

Ethically, the role of humans is to be the builder of community - both ecocommunity and world human community. Current U. S. policy is unjust in its selfishness and anti-world community in its spirit. Economic nationalism in relation to fossil fuel, on all sides, is the most urgent threat to peace at this time.

Question 3:

You mention the importance of human justice. How about justice for endangered plants and animals?

Rev. Steffenson:

The question of justice and the rights of nature is a very complex philosophical and legal question about which many differ. Up to now, the terms "justice" and "rights" have referred to human values and human affairs, and the issues involved in broadening those meanings are complex and esoteric and ones I have not settled for myself.

However, we can at least affirm that nature has integrity in its own right and there is no given right by humans to exploit it selfishly or to endanger any species for solely human reasons. I share your concern for endangered species.

I must also point out that to care about endangered species at all is a human value itself and is not an apparent value in nature. Species were endangered and became extinct long before humans came on earth, and that evolutionary process continues. To endanger them for selfish motives

or out of willful ignorance is contemptible and should be resisted, but I personally would give this problem a rather low priority on the list of ecological problems except where urgent action is needed in a specific case. For me, the top priority environmental problems are world famine, world injustice in economics, world population, imminent nuclear destruction and energy resource depletion. If we can find our way through these threats, many of the environmental problems such as pollution and its effects will be taken care of along the way. If your commitment to environmental concerns seduces you away from those crises in the human ecology, then your own priorities are questionable from my point of view.

Question 4:

How can one develop in others a sense of "we?" Isn't example the only way? Should we have and teach a sense of responsibility?

Ref. Steffenson:

A sense of "we" or community is what the human ecological role and task should be. It is a prime goal, as well as a major problem for religion and education. The "how" is very difficult, and that is what I understand this conference to be about - seeking the "how." Example is certainly a prime means toward that goal, but not the only one. Community is formed by lores, laws, shared symbolism, shared myths, open communication, ethical relationships, and primarily justice and love. Every institution in society has a part in building community - provided our society values community. Plato said it long ago: "What is honored in a country, will be cultivated there." We honor a system of values in which individualism and selfishness have been exalted, and both religion

and education have been too willing to join the world at those altars. We will achieve a sense of "we" to the degree we can change the values of individuals and institutions toward the ecological goals of community and interdependency. A sense of responsibility is part of the meaning of the process of community building.

Question 5:

You must consider the gross national product influence which is the cause of our sin. How does one deal with this?

Rev. Steffenson:

Quite the contrary, the gross national produce is a consequence of our sin, and it is so "gross" because we are so sinful. How does one deal with sin? That is the age-old human and religious question in the broad sense, and in the specific sense, that is what this conference is all about. There are no easy answers.

Question 6:

Religion - the traditional organized form - is in a serious decline. Do you feel that our environmental problems would be lessened if there were a stronger religious element in American life? Can we not have esthetics without the mumbo-jumbo of fundamental religion?

Rev. Steffenson:

Humans are incurably religious, and religion itself is on the increase - especially in terms of interest among our youth. Institutional religion (e.g., the American churches) is in trouble in many ways, but that picture is very mixed. World-wide, organized religion is often vigorous and growing, especially in places such as Africa, Latin American and parts of the Orient. However, a strong religious element is no

guarantee of a healthy environment depending upon the human actions that result from the various religious orientations. Shintoism is the most overtly nature-oriented religion in the modern world, yet as the dominant religion of Japan, we are well aware that it does not hold sway over the Western style economic expansionism and resulting environmental degradation in that nation. At the height of Taoism, the most philosophically profound religion from a nature point of view, China literally wiped out most of its forests. Yet parts of Christian Europe have been farmed productively in harmony with nature for over 1,000 years. I believe the most fundamental element in a sound relationship with our environment is ultimately religious, and a more healthy religious climate would certainly lessen our environmental problems. However, religion is not a "solution" in the utilitarian sense the question implies. Certainly one can relate to nature aesthetically and spiritually without the "mumbo-jumbo" of any specific religion, but I feel those relationships are ultimately and most profoundly religious in the broadest sense. And I would add that many of the world religions have elements of a more specific nature that can be helpful in working on environmental problems. Not all religions, nor all parts of specific religions, are equally helpful. And I've tried to point out today that while the Judeo-Christian heritage is guilty at some points of aiding and abetting the environmental crisis, it is not the cause of the crisis as some allege. In fact, I believe it has some elements necessary for finding workable solutions.